

TABLE 2.—Free-air resultant winds based on pilot balloon observations made near 5 p. m. (75th meridian time) during March 1942. Directions given in degrees from North (N=360°, E=90°, S=180°, W=270°)—Velocities in meters per second—Continued

Altitude (meters) m. s. l.	New York, N. Y. (15 m.)			Oakland, Calif. (8 m.)			Oklahoma City, Okla. (402 m.)			Omaha, Nebr. (306 m.)			Phoenix, Ariz. (338 m.)			Rapid City, S. Dak. (982 m.)			St. Louis, Mo. (181 m.)			San Antonio, Tex. (180 m.)			San Diego, Calif. (15 m.)			Sault St. Marie, Mich. (230 m.)			Seattle, Wash. (12 m.)			Spokane, Wash. (603 m.)			Washington, D. C. (24 m.)			
	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity	Observations	Direction	Velocity				
Surface.....	26	286	2.6	29	264	3.3	30	255	2.8	27	306	4.0	31	245	1.8	29	329	11.0	30	255	3.2	31	59	0.1	29	290	4.1	24	343	1.6	31	224	2.4	30	213	2.7	29	255	2.5	
500.....	24	266	5.9	29	284	1.9	30	251	2.8	27	303	3.9	31	260	2.0	29	329	11.0	30	264	5.3	31	276	0.3	29	293	3.5	24	344	1.2	31	214	3.2	30	225	4.3	29	266	3.9	
1,000.....	24	276	7.7	28	286	1.3	29	241	3.0	25	302	5.2	31	254	2.0	29	330	11.0	29	261	7.0	29	254	1.5	29	335	0.8	22	24	2.3	29	206	4.8	30	225	4.3	26	260	8.0	
1,500.....	23	279	9.9	27	292	1.9	28	274	3.9	21	287	6.3	31	265	1.4	29	326	11.5	26	259	8.0	29	256	3.5	25	62	1.4	18	32	3.9	24	215	5.4	29	231	4.8	23	262	11.4	
2,000.....	18	278	9.9	26	293	2.7	26	279	6.6	16	280	7.9	30	279	2.3	29	319	11.5	22	270	9.9	28	272	5.9	22	21	1.3	16	360	3.3	18	211	6.7	26	236	4.9	21	267	12.3	
2,500.....	11	294	11.4	25	313	3.2	23	279	10.4	13	304	10.4	28	291	4.0	24	313	12.8	20	267	10.8	25	273	9.0	20	343	1.5	12	337	7.1	17	220	7.2	23	248	5.4	18	279	13.2	
3,000.....				24	297	5.0	23	280	10.4	12	305	10.0	28	296	5.5	19	318	13.0	17	264	11.5	25	276	11.2	17	312	2.1	12	337	8.2	12	212	9.4	22	259	5.6	15	280	16.3	
4,000.....				23	300	7.9	23	276	14.5	10	307	15.0	27	296	9.9	16	311	13.1				22	270	15.3	15	285	4.3	12	328	10.2			15	266	7.7	13	280	17.3		
5,000.....				19	291	11.6	23	278	16.8				26	300	13.2	14	311	13.4				19	271	19.5	13	273	8.0	11	314	14.6			12	256	10.8	11	279	19.6		
6,000.....				15	292	10.5	20	292	18.6				25	296	16.1	13	314	15.5				16	272	22.5																
8,000.....													21	297	20.3	10	321	24.9				12	281	27.3																
10,000.....													17	291	25.1																									
12,000.....													11	283	31.4																									

TABLE 3.—Maximum free-air wind velocities (m. p. s.), for different sections of the United States, based on pilot-balloon observations during March 1942

Section	Surface to 2,500 meters (m. s. l.)					Between 2,500 and 5,000 meters (m. s. l.)					Above 5,000 meters (m. s. l.)				
	Maximum velocity	Direction	Altitude (m.) m. s. l.	Date	Station	Maximum velocity	Direction	Altitude (m.) m. s. l.	Date	Station	Maximum velocity	Direction	Altitude (m.) m. s. l.	Date	Station
Northeast ¹	41.7	W	620	10	Hartford, Conn.	54.8	W	4,080	7	Portland, Maine	72.8	SW	8,620	18	Portland, Maine.
East-Central ²	49.3	W	2,240	22	Huntington, W. Va.	50.6	WSW	3,860	9	Hatteras, N. C.	74.0	WSW	7,280	17	Huntington, W. Va.
Southeast ³	38.8	SW	2,320	8	Spartanburg, S. C.	60.0	WNW	4,420	2	Jacksonville, Fla.	67.5	WSW	11,600	6	Miami, Fla.
North-Central ⁴	45.0	NW	1,780	6	Rapid City, S. Dak.	43.4	NNW	4,920	8	Bismarck, N. Dak.	71.6	NNW	8,090	1	Rapid City, S. Dak.
Central ⁵	44.6	SW	2,310	6	Springfield, Mo.	58.0	NW	4,570	18	Stout City, Iowa	72.1	WNW	10,710	13	Wichita, Kans.
South-Central ⁶	37.4	N	1,770	4	Big Spring, Tex.	43.5	NNW	3,310	2	Lake Charles, La.	83.0	WSW	12,280	27	Abilene, Tex.
Northwest ⁷	43.4	WSW	2,110	5	Great Falls, Mont.	40.1	SW	5,000	22	Ellensburg, Wash.	77.4	N	9,310	14	Tatoosh, Wash.
West-Central ⁸	43.9	NW	2,500	27	Cheyenne, Wyo.	55.4	NW	4,300	17	Cheyenne, Wyo.	72.0	NW	12,400	16	Redding, Calif.
Southwest ⁹	53.2	WNW	2,370	4	El Paso, Tex.	63.0	N	4,440	6	Las Vegas, Nev.	73.0	NW	13,090	5	El Paso, Tex.

¹ Maine, Vermont, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, and Northern Ohio.

² Delaware, Maryland, Virginia, West Virginia, Southern Ohio, Kentucky, Eastern Tennessee, and North Carolina.

³ South Carolina, Georgia, Florida, and Alabama.

⁴ Michigan, Wisconsin, Minnesota, North Dakota, and South Dakota.

⁵ Indiana, Illinois, Iowa, Nebraska, Kansas, and Missouri.

⁶ Mississippi, Arkansas, Louisiana, Oklahoma, Texas (except El Paso), and Western Tennessee.

⁷ Montana, Idaho, Washington, and Oregon.

⁸ Wyoming, Colorado, Utah, Northern Nevada, and Northern California.

⁹ Southern California, Southern Nevada, Arizona, New Mexico, and extreme West Texas.

RIVER STAGES AND FLOODS

By BENNETT SWENSON

Precipitation during March was above normal in all of the Atlantic States, the East Gulf drainage, the Great Lakes Region, and in the Central-Northern States. Floods occurred in portions of New York and Pennsylvania, in the Southeastern States, southern Michigan, and in portions of the Ohio Basin. The floods were unusually severe in Michigan and in the Oconee and Ocumgee Rivers in Georgia, where previous maximum stages were equaled or exceeded in some instances, otherwise the floods were mostly light to moderate.

St. Lawrence drainage.—Excessive flooding occurred in the streams of the lower Michigan Peninsula during March as the result of two storms and mild temperatures. On March 8-9, rains and heavy, melting snow caused rapidly rising river stages and some flooding from ice jams as the ice moved out. The high water continued until March 16, when additional heavy rains were general over this area. The heavy rains and rising temperatures, together with the remaining frost that left the ground, released great quantities of water into the already swollen streams and caused flooding in most of the rivers.

In the Grand River, stages approached, but did not equal, the high stages recorded in 1904. The crest stage

reached at Grand Rapids, Mich., was 16.1 feet on March 20, with the lower sections of the city being inundated. The losses, confined principally to highways, and small dwellings in North Park and Comstock Park, were estimated at about \$63,000.

The entire Saginaw River Basin was in flood with the highest stages of record being equaled or exceeded at some points. The peak stage of 19 feet at Vassar, Mich., on the Cass River, equaled the record stage in the flood of 1904.

The Maumee River system in northern Indiana and Ohio experienced two rises during March, but stages only slightly above flood stage were reached.

Heavy rains on March 16-17 caused severe local flooding in western New York. A report of the storm is given on page 61, in this REVIEW under the heading, "Severe Local Storms."

Atlantic Slope drainage.—A general rise occurred in the Susquehanna basin as the result of snow melt from a moderately heavy fall on the 3rd and 4th and light to moderate rain on the night of March 8-9. General flooding resulted in the upper basin down to, and including Towanda, Pa.

On the 16th-17th, heavy rains in the drainage above, and moderate rains below, Towanda produced a second flooding. In this case the overflow again was confined to

the upper basin but did not extend much below Vestal, N. Y. At the end of the month stream heights were near normal and ground water conditions greatly improved.

Floods prevailed generally in the Southeastern States from eastern North Carolina southward. The floods were severe in the Ocmulgee and Oconee Rivers, the stage at Macon, Ga., on the Ocmulgee River, equaling the previous maximum stage of 26 feet, which occurred in February 1929. Otherwise, the floods were mostly light to moderate.

The rainfall, which was well above normal, was fairly well distributed throughout the month. In the upper watersheds of the Oconee and Ocmulgee Rivers, the rainfall during the month averaged 9 to 10 inches in the former and 10 to 12 inches in the latter basin. The floods in these rivers developed into major proportions following heavy rains on March 20-21.

East Gulf of Mexico drainage.—Precipitation, occurring at frequent intervals throughout the month, was well above normal in practically the entire drainage. Rainfall amounts in general were heaviest on March 16-17 and 20-21. Light to moderate overflows resulted in most of the streams during the latter half of the month. Losses were not great; livestock and the lumber interests, mainly, were affected.

Missouri River Basin.—The Grand River was in moderate flood at Chillicothe and Gallatin, Mo., during the month, but bankful stage was not reached in the lower reaches. Due to the early date there was little or no crop damage and the stages were not high enough to cause property damage.

Some overflow of the lowlands occurred along the Missouri River in North Dakota where ice gorges formed between March 12 and 24. However, no damage resulted.

Upper Mississippi River Basin.—The Illinois River continued in flood at Havana and Beardstown, Ill., from the previous month until March 7. Another flood of lesser intensity began upstream at Morris, Ill., on March 17 and the river was still above bankful at Havana and Beardstown at the end of March.

The ice in the upper Mississippi River had gradually disintegrated during the last 2 weeks of February and a general movement of the ice took place during the first week of March. At La Crosse, Wis., the ice began to move on March 6 and by the 15th, navigation was possible up to Lake Pepin, the Spring break-up occurring about 15 days earlier than the average.

Ohio River Basin.—The Ohio River began to rise in the upper portion early in the month from light rain falling on melting snow. As the rise progressed downstream it was augmented by additional rains during the middle of the month. Bankful stages were closely approximated, reached or exceeded in the reach of the river from a short distance below Louisville, Ky., to the mouth. Damage from the flooding was minor as the stages were comparatively low and it was too early in the season to affect prospective crops to any great extent.

Due to the wet condition of the soil, moderately heavy rains on the night of March 8 caused a minor flood in the French Broad River at Asheville and Hot Springs, N. C.

In the Wabash River Basin, the streams had fallen to low stages from the high waters of February, and continued low during the first week of March. However, a general, heavy rain occurred on March 8-9, averaging about 1.35 inch. Slight flooding resulted in the upper Wabash and in the West Fork of the White. Additional rains on the 13-17th affected the stages in the middle and lower channels. The later crests, as affected by these

rains, occurred in the lower channels generally around the 19th to 21st.

The following report relative to the flooding in the upper Ohio basin is submitted by the official in charge at Pittsburgh:

The moderately high waters during the period March 9 to 19 were the result of melting snow and ice gorge, and a succession of southwest storms. Flood stages were experienced only on the Allegheny River. Pittsburgh was out of pool from noon March 9 to 6 p. m. March 21 and had four crests during that period, namely, 23.3 feet at 8 a. m., 10th; 20.0 feet at 5 a. m., 13th; 20.6 feet at 1 p. m., 15th; and 22 feet at 7:30 p. m. on the 17th. Flood stage was exceeded at Warren, Pa., and Lock Nos. 4, 5, and 8 on the Allegheny River. Minor damage was reported on French Creek in the vicinity of Meadville, Pa., and on the Allegheny River at Warren, Pa. The principal damage was to summer cottages, flooded cellars and washouts on the highway.

The first rise of the period was the result of melting snow from the storm of March 2-3. The snow was general over the Upper Ohio Basin and averaged about 12 inches, with an average water content of about 1.2 inches. The run-off from the melting snow was gradual, beginning on the 7th and reaching the crest on the 9th and 10th. The temperatures during this period (7 a. m. of the 7th to 7 a. m. of the 9th) were above freezing for most stations. The mid-day temperatures on the 5th and 6th averaged 43 and 35 degrees, respectively. The snow cover during this period was compacted somewhat, but the run-off resulting was very local. Data from a snow survey made during this period showed that the snow cover had a high water content and that part next to the ground surface was saturated. In addition to the run-off from the melting snow, rain was general over the basin above Pittsburgh on the morning of March 8-9, and averaged about 0.3 inch. An ice gorge on the Allegheny River in the vicinity of Lock No. 9 also aggravated the condition on that stream. The gorge broke during the morning of the 9th, and as a result, there was running ice on the Allegheny from Lock No. 9 to Pittsburgh, Pa. The second and third rises were caused by moderate rain, with the river above normal. The rain averaged about 0.5 inch on the 12th and 0.8 inch on the 14th. There was also some snow melt from the headwaters of the Allegheny Basin. The fourth rise was rather abnormal in its run-off characteristics. The rainfall was from thundershowers, with a duration of two to four hours, was simultaneous over the basin, and averaged about 0.8 inch. The storm occurred between noon and 4 p. m. of the 16th and the larger amounts were over the Allegheny and Ohio Basins.

This rainfall produced rapid run-off and double crest on the Allegheny River above Lock No. 4. Although there were no excessive stages reported during the period, March 9-19, the "continued near flood stage condition" of the rivers gave the public much concern, owing to a marked parallel with the antecedent conditions of the March 1936 flood.

Estimated flood losses and savings, March 1942¹

River and drainage	Tangible property	Matured crops	Prospective crops	Livestock and other movable farm property	Suspension of business	Total losses	Total savings
ST. LAWRENCE							
Grand River in Michigan.....	\$63,575				\$1,250	\$64,825	\$185,000
Saginaw River.....	62,400	\$5,000		\$25,000	3,350	85,750	10,000
ATLANTIC SLOPE							
Pee Dee River.....	5,230		\$780	2,400	19,150	27,560	13,000
Santee River.....			3,100	3,000	24,000	30,100	18,700
Savannah River.....					1,500	1,500	5,000
EAST GULF OF MEXICO							
Tombigbee-Black Warrior River.....					5,000	5,000	10,000
Pascagoula River.....	2,500		300	3,300	7,500	13,600	8,500
MISSISSIPPI SYSTEM							
<i>Ohio Basin</i>							
Allegheny River.....	3,500					3,500	
Ohio River.....	5,000		10,000	3,000	11,000	29,000	175,000

¹ Data in connection with floods in Susquehanna, Ocmulgee, and Oconee Rivers not available.

Lower Mississippi Basin.—Heavy rains on March 7-8, caused slight flooding in the basins of the White, Ouachita, and Petit Jean Rivers, all in Arkansas.

Some flooding occurred also in the St. Francis River Basin in Arkansas, the Coldwater River in Mississippi, and the Sulphur River in Texas, but with no appreciable damage.

FLOOD-STAGE REPORT, MARCH 1942

(All dates in March unless otherwise specified)

River and station	Flood stage	Above flood stages—dates		Crest	
		From—	To—	Stage	Date
ST. LAWRENCE DRAINAGE					
Lake Michigan					
Red Cedar:	Feet			Feet	
Williamston, Mich.....	7	{ 9	9	7.2	
		{ 17	18	8.3	
East Lansing, Mich.....	8	{ 9	9	8.0	
		{ 17	19	9.6	
Grand:					
Lansing, Mich.....	11	17	18	11.9	
Ionia, Mich.....	21	17	20	23.1	
Lowell, Mich.....	15	17	21	17.6	
Grand Rapids, Mich.....	15	19	21	16.1	
Lake Huron					
Flint:					
Columbiaville, Mich.....	10	{ 9	12	11.9	
		{ 17	20	13.1	
Flint, Mich.....	11	{ 17	20	13.0	
Cass: Vassar, Mich.....	14	{ 8	10	15.0	
		{ 16	19	19.0	
Shiawassee: Owosso, Mich.....	7	{ 12	12	7.2	
		{ 16	18	9.0	
Tittabawassee: Midland, Mich.....	18	17	20	20.9	
Saginaw: Saginaw, Mich.....	19	18	23	21.0	
Lake Erie					
St. Marys: Decatur, Ind.....	13	9	11	13.8	
St. Joseph:					
Fort Wayne, Ind.....	12	17	19	12.5	
Montpelier, Ohio.....	10	{ 7	13	11.5	
		{ 17	20	11.8	
Maumee: Fort Wayne, Ind.....	15	17	18	15.0	17-18
ATLANTIC SLOPE DRAINAGE					
Nashua: East Pepperell, Mass.....	8	11	11	8.1	
		{ 9	10	12.3	
		{ 16	18	14.6	
Tloughnioga: Whitney Point, N. Y.....	12	{ 20	20	12.3	
		{ 22	22	12.3	
Chenango:					
Sherburne, N. Y.....	8	{ 9	10	9.0	
		{ 16	19	9.2	
Greene, N. Y.....	8	{ 9	10	8.9	
		{ 17	19	10.9	
Binghamton, N. Y.....	16	18	19	16.3	
Chemung:					
Corning, N. Y.....	16	9	10	17.6	
		{ 9	10	15.9	
Elmira, N. Y.....	12	{ 17	18	13.2	
		{ 9	10	17.5	
Chemung, N. Y.....	12	{ 17	19	14.8	
Susquehanna:					
Oneonta, N. Y.....	12	{ 9	11	14.2	
		{ 17	24	18.0	
Bainbridge, N. Y.....	12	17	20	16.0	
		{ 9	11	17.1	
Vestal, N. Y.....	14	{ 17	20	18.1	
		{ 16	10	17.2	
Towanda, Pa.....	16	10	10	17.2	
Roanoke: Williamston, N. C.....	10	15	15	10.0	
Neuse: Smithfield, N. C.....	13	10	12	13.2	
Cape Fear: Lock No. 2, Elizabethtown, N. C.....	22	10	13	25.4	
Lynch: Effingham, S. C.....	14	16	18	14.3	
Pee Dee:					
Cheraw, S. C.....	30	10	11	134.0	
		{ 5	19	18.5	
Mars Bluff Bridge, S. C.....	17	{ 24	27	20.0	
		{ 24	27	17.5	
Poston, S. C.....	18	10	22	20.1	
		{ 9	13	12.2	
Black: Kingstree, S. C.....	12	{ 24	25	12.1	
Saluda:					
		{ 9	11	7.0	
Pelzer, S. C.....	6	{ 15	16	6.5	
		{ 21	22	6.8	
Chappels, S. C.....	13	{ 17	18	17.9	
		{ 21	23	22.8	
		{ 3	4	16.0	
Broad: Blairs, S. C.....	14	{ 9	10	16.6	
		{ 21	22	16.3	
Catawba:					
Catawba, N. C.....	8	10	10	8.6	
Catawba, S. C.....	11	9	9	13.9	
Wateree: Camden, S. C.....	23	10	11	25.0	
Santee: Rimini, S. C.....	12	(*)	(*)	15.4	
Broad: Carlton, Ga.....	15	21	22	16.3	

FLOOD-STAGE REPORT, MARCH 1942—Continued

River and station	Flood stage	Above flood stages—dates		Crest	
		From—	To—	Stage	Date
ATLANTIC SLOPE DRAINAGE—continued					
Savannah:	<i>Feet</i>			<i>Feet</i>	
Augusta, Ga.....	32	23	23	32.0	23
Butler Creek, Ga.....	21	22	25	24.5	23
Clyo, Ga.....	11	(^o)	(^o)	20.0	29
Ogeechee:					
Midville, Ga.....	6	22	28	7.7	26
				8.9	14
Dover, Ga.....	7	(^o)	(^o)	9.4	26
				9.9	29
Ocmulgee:					
Macon, Ga.....	18	21	24	26.0	22
Hawkinsville, Ga.....	25	24	28	32.0	25
Abbeville, Ga.....	11	10	13	11.4	11
	23	(^o)		17.8	27-28
Lumber City, Ga.....	15	29	(^o)	19.6	31
Oconee:					
Milledgeville, Ga.....	20	21	26	31.6	22
Dublin, Ga.....	21	24	30	27.5	26
Mount Vernon, Ga.....	16	24	(^o)	20.9	28
Altamaha:					
Charlotte, Ga.....	12	(^o)	(^o)	16.4	13
				23.7	31
Everett City, Ga.....	10	3	(^o)	13.9	Apr. 5
EAST GULF OF MEXICO DRAINAGE					
Chattahoochee:					
West Point, Ga.....	19	22	23	20.2	22
Columbus, Ga.....	34	22	23	38.0	22
Eufaula, Ala.....	40	22	25	45.3	24
Columbia, Ala.....	42	24	25	42.4	24
Flint:					
Montezuma, Ga.....	20	24	26	21.4	25
Albany, Ga.....	20	25	30	27.1	28
Bainbridge, Ga.....	25	28	(^o)	27.9	31
Apalachicola:					
River Junction, Fla.....	20	25	28	22.4	27
Chattahoochee, Fla.....	20	24	28	22.3	27
Blountstown, Fla.....	15	(^o)	(^o)	22.1	27-28
Oostanaula: Rome, Ga.....	25	22	23	27.0	23
Etowah:					
Canton, Ga.....	17	22	22	19.1	22
Cartersville, Ga.....	18	21	23	24.5	22
Coosa:					
Mayos Bar Lock, Ga.....	28	23	24	29.4	23
Gadsden, Ala.....	20	23	26	20.7	24
Wetumpka, Ala.....	45	21	21	45.3	21
Cahaba:					
Centerville, Ala.....	23	21	22	30.0	21
Marion Junction, Ala.....	36	24	24	36.8	24
Alabama:					
Montgomery, Ala.....	35	22	26	40.8	23
Millers Ferry, Ala.....	40	23	31	47.4	27
Black Warrior:					
Lock No. 10, Tuscaloosa, Ala.....	47	21	22	48.2	21
Lock No. 7, Eutaw, Ala.....	35	21	28	43.3	24
Tombigbee:					
Lock No. 4, Demopolis, Ala.....	39	20	(^o)	51.3	24-25
	(^o)	19	(^o)	38.4	7
Lock No. 3, Ala.....	33	21	(^o)	53.6	25
Lock No. 2, Ala.....	46	21	(^o)	54.8	27
Lock No. 1, Ala.....	31	(^o)	10	32.2	8
	21	(^o)		37.0	29-30
Chickasawhay:					
Enterprise, Miss.....	20	21	24	27.4	22
Shubuta, Miss.....	26	21	29	34.4	25
Pascagoula: Merrill, Miss.....	22	26	(^o)	23.2	29
Pearl:					
Jackson, Miss.....	18	14	20	19.4	17
		23	30	19.2	28
Monticello, Miss.....	15	22	22	15.2	22
		8	13	12.4	10-11
Pearl River, La.....	12	24	(^o)	14.0	28
MISSISSIPPI SYSTEM					
Upper Mississippi Basin					
Illinois:					
Morris, Ill.....	13	17	21	15.8	18
Peru, Ill.....	17	17	24	19.4	18
Peoria, Ill.....	18	21	25	18.6	23
	(^o)	19	(^o)	18.7	Feb. 19
Havana, Ill.....	14	19	(^o)	16.2	23-25
	(^o)	18	(^o)	20.8	17-18
Beardstown, Ill.....	14	18	(^o)	17.2	24-26
Missouri Basin					
Grand:					
Gallatin, Mo.....	20	7	7	21.1	7
		26	27	23.4	27
Chillicothe, Mo.....	18	6	9	25.6	7
		26	28	24.6	27
Ohio Basin					
Allegheny:					
Warren, Pa.....	12	18	18	12.5	18
Lock No. 8, Mosgrove, Pa.....	24	10	10	24.8	10
		17	19	25.7	18
		10	11	26.0	10
Lock No. 5, Schenley, Pa.....	24	15	15	24.1	15
		16	20	26.5	17
Lock No. 4, Natrona, Pa.....	24	10	10	24.4	10
		17	19	25.0	17
Lock No. 3, Acmetonia, Pa.....	25	18	18	25.0	18

See footnotes at end of table.